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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,358	08/05/2003	Gregory D. VanWiggeren	10030268-1	8816

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AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599

EXAMINER

ANDERSON, DENISE BROWN

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/634,358

Applicant(s)

VANWIGGEREN ET AL.

Examiner

Denise B. Anderson

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2003.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 1-19 is/are allowed.
6) ☒ Claim(s) 20-25 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/5/03.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 20-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Tan et al (US Patent No. 6,750,973).

1. As to claim 20, the applicant claims generating an expanded local oscillator signal and combining that signal with light from a device under test (DUT) for use in multiple interferometric measurements. Tan et al discloses a test structure for simultaneously characterizing two ports of an optical component using interferometer-based optical network analysis. In figure 2, Tan et al discloses a local oscillator signal 250 being generated from a source 246. Coupler 226 generates the expanded signal. The broad definition of expand is “to increase the size, volume, quantity, or scope of; enlarge” (www.dictionary.com). Based on this broad definition, the coupler 226 expands the single oscillator signal into multiple (3) signals (i.e., the coupler increases the quantity of beams). This expanded signal is combined with light from the component under test 202

Art Unit: 2877

and is used for 2 different interferometric measurements at receivers 238 and 240. See also column 3, lines 51-53.

2. As to claim 21, the applicant claims focusing part of the expanded signal into multiple beams. The broad term of the word focus is "to direct toward a particular point or purpose:" (www.dictionary.com). In figure 2, Tan et al discloses a coupler 228 that directs part of the expanded signal 272 towards test port 222 for use in the DUT and another portion 280 towards receiver 232. See also column 4, lines 2-4.

3. As to claim 22, the applicant claims combining multiple beams with light from the DUT. In figure 2, Tan et al discloses couplers 232 and 234 for combining light beams 280 and 284 from the component under test 202 with light beams 243 and 245, split by coupler 226. See also column 4, lines 28-46.

4. As to claim 23, the applicant claims splitting the expanded signal into a reference and a test beam. In figure 1, Tan et al discloses reference beams 243 and 245 and test beam 272, split by coupler 226. See also column 4, lines 8-13.

5. As to claim 24, the applicant claims combining portions of test beams and reference beams for multiple interferometric measurements. In figure 1, Tan et al discloses couplers 232 and 234, which combine reference beams 243 and 245 with test beams 280 and 284, respectively, which interfere and are received by receivers 238 and 240. See also column 4, lines 62-66; column 5, lines 24-27.

6. As to claim 25, the applicant claims focusing a test beam into multiple beams. Using again the broad definition of focus from above, Tan et al discloses in figure 1 the component under test 202, which directs a reflected beam and a

Art Unit: 2877

transmitted beam via optical paths 264 and 266, respectively, towards the optical couplers 232 and 234, respectively. See also column 4, lines 32-37.

Allowable Subject Matter

7. Claims 1-19 are allowed.
8. As to claim 1, the prior art of record, taken alone or in combination, fails to disclose or render obvious a beam expander in combination with a lens array and multiple parallel interferometric measurements.
9. Claims 1-10 are allowed since they depend on an allowed independent claim (1).
10. As to claim 11, the prior art of record, taken alone or in combination, fails to disclose or render obvious a beam expander in combination with multiple parallel interferometric measurements. Claims 12-19 are allowed since they depend on an allowed independent claim (2).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

11. Sorin et al (US Patent No. 6,766,115) discloses simultaneously monitoring multiple ports of an optical device using a single receiver.

The following art is also made of record:

12. Rosenfeldt (US Patent Application No. 2005/0117159 A1) discloses the determination of properties of an optical device under test using at least one resulting superimposed light beam.

Art Unit: 2877

Fax/Telephone Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Denise B. Anderson whose telephone number is 571-272-8324. The examiner can normally be reached on Mon-Fri (9:30 AM - 6 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley Jr. can be reached on 571-272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory J. Toatley, Jr.
Supervisory Patent Examiner
Art Unit 2877

DBA


ZANDRA V. SMITH
PRIMARY EXAMINER

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Art Unit: 2877

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Art Unit: 2877

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Art Unit: 2877

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Gregory J. Toatley, Jr.
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